

ANALYTICAL RESULTS

Prepared for:

Langan
500 Hyde Park
Doylestown PA 18901

215-348-7101

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425**SAMPLE GROUP**

The sample group for this submittal is 942334. Samples arrived at the laboratory on Thursday, May 05, 2005. The PO# for this group is SUNOCO PHILLY REFINER.

Client DescriptionS97-050405 Grab Water Sample
S123-050405 Grab Water Sample
S28-050405 Grab Water Sample
S121-050405 Grab Water Sample**Lancaster Labs Number**4518610
4518611
4518612
4518613ELECTRONIC SUN: Aquaterra Tech.
COPY TO
1 COPY TO LL
1 COPY TO Langan
ELECTRONIC Langan
COPY TOAttn: Brad Spancake

Attn: Angela Miller
Attn: Jason Hanna
Attn: Dennis Webster

Questions? Contact your Client Services Representative
Angela M Miller at (717) 656-2300.

Respectfully Submitted,



Michele J. Smith
Group Leader



Analysis Report

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Lancaster Laboratories Sample No. WW 4518610

S97-050405 Grab Water Sample
SUN: Philadelphia Refinery AOI-4

Collected: 05/04/2005 12:40 by MBS

Account Number: 10132

Submitted: 05/05/2005 14:30
Reported: 05/17/2005 at 16:18
Discard: 06/17/2005

Langan
500 Hyde Park
Doylestown PA 18901

S-097

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Units	Dilution Factor
06035	Lead	7439-92-1	< 0.0010	0.0010	0.00021	mg/l	1
07879	EDB in Wastewater						
01087	Ethylene dibromide	106-93-4	< 0.028	0.028	0.0094	ug/l	1
07805	PAHs in Water by GC/MS						
03947	Naphthalene	91-20-3	110.	10.	1.	ug/l	1
03956	Fluorene	86-73-7	25.	10.	1.	ug/l	1
03963	Phenanthrene	85-01-8	47.	10.	1.	ug/l	1
03967	Pyrene	129-00-0	< 10.	10.	1.	ug/l	1
03971	Chrysene	218-01-9	< 10.	10.	1.	ug/l	1
02302	UST-Waters by 8260B						
02010	Methyl Tertiary Butyl Ether	1634-04-4	< 50.	50.	5.	ug/l	10
05401	Benzene	71-43-2	600.	50.	5.	ug/l	10
05402	1,2-Dichloroethane	107-06-2	< 50.	50.	10.	ug/l	10
05407	Toluene	108-88-3	< 50.	50.	7.	ug/l	10
05415	Ethylbenzene	100-41-4	63.	50.	8.	ug/l	10
05420	Isopropylbenzene	98-82-8	< 50.	50.	10.	ug/l	10
06310	Xylene (Total)	1330-20-7	230.	50.	8.	ug/l	10

Due to the level of benzene, the reporting limits for all GC/MS volatile compounds were raised.

Commonwealth of Pennsylvania Lab Certification No. 36-037

This sample was filtered in the lab for dissolved metals.

Trip blank vials were not received by the laboratory for this sample group.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
06035	Lead	SW-846 6020	1	05/10/2005 23:49	David K Beck	1
07879	EDB in Wastewater	SW-846 8011	1	05/10/2005 06:41	James H Place	1
07805	PAHs in Water by GC/MS	SW-846 8270C	1	05/09/2005 13:26	Joseph M Gambler	1
02302	UST-Waters by 8260B	SW-846 8260B	1	05/08/2005 16:40	Jason M Long	10

*=This limit was used in the evaluation of the final result

Lancaster Laboratories Sample No. WW 4518610**S97-050405 Grab Water Sample****SUN: Philadelphia Refinery AOI-4**

Collected: 05/04/2005 12:40 by MBS

Account Number: 10132

Submitted: 05/05/2005 14:30

Langan

Reported: 05/17/2005 at 16:18

500 Hyde Park

Discard: 06/17/2005

Doylestown PA 18901

S-097

01163	GC/MS VOA Water Prep	SW-846 5030B	1	05/08/2005 16:40	Jason M Long	n.a.
06050	ICP/MS SW-846 Water	SW-846 3010A Mod.	1	05/08/2005 19:20	James L Mertz	1
07786	EDB Extraction	SW-846 8011	1	05/09/2005 12:10	Darin P Wagner	1
07807	BNA Water Extraction	SW-846 3510C	1	05/06/2005 21:00	Elia R Botrous	1

Lancaster Laboratories Sample No. WW 4518611

S123-050405 Grab Water Sample
SUN: Philadelphia Refinery AOI-4

Collected: 05/04/2005 12:50 by MBS

Account Number: 10132

Submitted: 05/05/2005 14:30
Reported: 05/17/2005 at 16:18
Discard: 06/17/2005

Langan
500 Hyde Park
Doylestown PA 18901

S-123

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Units	Dilution Factor
06035	Lead	7439-92-1	< 0.0010	0.0010	0.00021	mg/l	1
07879	EDB in Wastewater						
01087	Ethylene dibromide	106-93-4	< 0.028	0.028	0.0094	ug/l	1
07805	PAHs in Water by GC/MS						
03947	Naphthalene	91-20-3	26.	10.	1.	ug/l	1
03956	Fluorene	86-73-7	13.	10.	1.	ug/l	1
03963	Phenanthrene	85-01-8	34.	10.	1.	ug/l	1
03967	Pyrene	129-00-0	< 10.	10.	1.	ug/l	1
03971	Chrysene	218-01-9	< 10.	10.	1.	ug/l	1
02302	UST-Waters by 8260B						
02010	Methyl Tertiary Butyl Ether	1634-04-4	< 5.	5.	0.5	ug/l	1
05401	Benzene	71-43-2	8.	5.	0.5	ug/l	1
05402	1,2-Dichloroethane	107-06-2	< 5.	5.	1.	ug/l	1
05407	Toluene	108-88-3	190.	5.	0.7	ug/l	1
05415	Ethylbenzene	100-41-4	68.	5.	0.8	ug/l	1
05420	Isopropylbenzene	98-82-8	10.	5.	1.	ug/l	1
06310	Xylene (Total)	1330-20-7	250.	5.	0.8	ug/l	1

Commonwealth of Pennsylvania Lab Certification No. 36-037

This sample was filtered in the lab for dissolved metals.

Trip blank vials were not received by the laboratory for this sample group.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
06035	Lead	SW-846 6020	1	05/10/2005 23:53	David K Beck	1
07879	EDB in Wastewater	SW-846 8011	1	05/10/2005 08:10	James H Place	1
07805	PAHs in Water by GC/MS	SW-846 8270C	1	05/09/2005 14:18	Joseph M Gambler	1
02302	UST-Waters by 8260B	SW-846 8260B	1	05/08/2005 17:01	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	05/08/2005 17:01	Jason M Long	n.a.
06050	ICP/MS SW-846 Water	SW-846 3010A Mod.	1	05/08/2005 19:20	James L Mertz	1
07786	EDB Extraction	SW-846 8011	1	05/09/2005 12:10	Darin P Wagner	1

*=This limit was used in the evaluation of the final result



Analysis Report

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Lancaster Laboratories Sample No. WW 4518611

S123-050405 Grab Water Sample

SUN: Philadelphia Refinery AOI-4

Collected: 05/04/2005 12:50 by MBS

Account Number: 10132

Submitted: 05/05/2005 14:30

Langan

Reported: 05/17/2005 at 16:18

500 Hyde Park

Discard: 06/17/2005

Doylestown PA 18901

S-123

07807 BNA Water Extraction

SW-846 3510C

1 05/06/2005 21:00 Elia R Botrous

1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories Sample No. WW 4518612

S28-050405 Grab Water Sample
SUN: Philadelphia Refinery AOI-4

Collected: 05/04/2005 13:15 by MBS

Account Number: 10132

Submitted: 05/05/2005 14:30
Reported: 05/17/2005 at 16:18
Discard: 06/17/2005

Langan
500 Hyde Park
Doylestown PA 18901

S-028

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Units	Dilution Factor
06035	Lead	7439-92-1	< 0.0010	0.0010	0.00021	mg/l	1
07879	EDB in Wastewater						
01087	Ethylene dibromide	106-93-4	< 0.029	0.029	0.0095	ug/l	1
07805	PAHs in Water by GC/MS						
03947	Naphthalene	91-20-3	12.	10.	1.	ug/l	1
03956	Fluorene	86-73-7	12.	10.	1.	ug/l	1
03963	Phenanthrene	85-01-8	26.	10.	1.	ug/l	1
03967	Pyrene	129-00-0	< 10.	10.	1.	ug/l	1
03971	Chrysene	218-01-9	< 10.	10.	1.	ug/l	1
02302	UST-Waters by 8260B						
02010	Methyl Tertiary Butyl Ether	1634-04-4	270.	25.	3.	ug/l	5
05401	Benzene	71-43-2	51.	5.	0.5	ug/l	1
05402	1,2-Dichloroethane	107-06-2	< 5.	5.	1.	ug/l	1
05407	Toluene	108-88-3	< 5.	5.	0.7	ug/l	1
05415	Ethylbenzene	100-41-4	12.	5.	0.8	ug/l	1
05420	Isopropylbenzene	98-82-8	6.	5.	1.	ug/l	1
06310	Xylene (Total)	1330-20-7	13.	5.	0.8	ug/l	1

Commonwealth of Pennsylvania Lab Certification No. 36-037

This sample was filtered in the lab for dissolved metals.

Trip blank vials were not received by the laboratory for this sample group.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
06035	Lead	SW-846 6020	1	05/10/2005 23:57	David K Beck	1
07879	EDB in Wastewater	SW-846 8011	1	05/10/2005 09:10	James H Place	1
07805	PAHs in Water by GC/MS	SW-846 8270C	1	05/09/2005 15:10	Joseph M Gambler	1
02302	UST-Waters by 8260B	SW-846 8260B	1	05/08/2005 17:22	Jason M Long	1
02302	UST-Waters by 8260B	SW-846 8260B	1	05/09/2005 20:39	Shawn J Rice	5
01163	GC/MS VOA Water Prep	SW-846 5030B	1	05/08/2005 17:22	Jason M Long	n.a.
01163	GC/MS VOA Water Prep	SW-846 5030B	2	05/09/2005 20:39	Shawn J Rice	n.a.

*=This limit was used in the evaluation of the final result

Lancaster Laboratories Sample No. WW 4518612

S28-050405 Grab Water Sample

SUN: Philadelphia Refinery AOI-4

Collected: 05/04/2005 13:15 by MBS

Account Number: 10132

Submitted: 05/05/2005 14:30

Langan

Reported: 05/17/2005 at 16:18

500 Hyde Park

Discard: 06/17/2005

Doylestown PA 18901

S-028

06050	ICP/MS SW-846 Water	SW-846 3010A Mod.	1	05/08/2005 19:20	James L Mertz	1
07786	EDB Extraction	SW-846 8011	1	05/09/2005 12:10	Darin P Wagner	1
07807	BNA Water Extraction	SW-846 3510C	1	05/06/2005 21:00	Elia R Botrous	1

Lancaster Laboratories Sample No. WW 4518613

S121-050405 Grab Water Sample
SUN: Philadelphia Refinery AOI-4

Collected: 05/04/2005 14:00 by MBS

Account Number: 10132

Submitted: 05/05/2005 14:30
Reported: 05/17/2005 at 16:18
Discard: 06/17/2005

Langan
500 Hyde Park
Doylestown PA 18901

S-121

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation*	As Received Method Detection Limit	Units	Dilution Factor
06035	Lead	7439-92-1	< 0.0010	0.0010	0.00021	mg/l	1
07879	EDB in Wastewater						
01087	Ethylene dibromide	106-93-4	< 0.028	0.028	0.0094	ug/l	1
07805	PAHs in Water by GC/MS						
03947	Naphthalene	91-20-3	< 10.	10.	1.	ug/l	1
03956	Fluorene	86-73-7	< 10.	10.	1.	ug/l	1
03963	Phenanthrene	85-01-8	< 10.	10.	1.	ug/l	1
03967	Pyrene	129-00-0	< 10.	10.	1.	ug/l	1
03971	Chrysene	218-01-9	< 10.	10.	1.	ug/l	1
02302	UST-Waters by 8260B						
02010	Methyl Tertiary Butyl Ether	1634-04-4	< 5.	5.	0.5	ug/l	1
05401	Benzene	71-43-2	< 5.	5.	0.5	ug/l	1
05402	1,2-Dichloroethane	107-06-2	< 5.	5.	1.	ug/l	1
05407	Toluene	108-88-3	< 5.	5.	0.7	ug/l	1
05415	Ethylbenzene	100-41-4	< 5.	5.	0.8	ug/l	1
05420	Isopropylbenzene	98-82-8	< 5.	5.	1.	ug/l	1
06310	Xylene (Total)	1330-20-7	< 5.	5.	0.8	ug/l	1

Commonwealth of Pennsylvania Lab Certification No. 36-037

This sample was filtered in the lab for dissolved metals.

Trip blank vials were not received by the laboratory for this sample group.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
06035	Lead	SW-846 6020	1	05/11/2005 00:01	David K Beck	1
07879	EDB in Wastewater	SW-846 8011	1	05/10/2005 09:40	James H Place	1
07805	PAHs in Water by GC/MS	SW-846 8270C	1	05/09/2005 16:03	Joseph M Gambler	1
02302	UST-Waters by 8260B	SW-846 8260B	1	05/08/2005 17:44	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	05/08/2005 17:44	Jason M Long	n.a.
06050	ICP/MS SW-846 Water	SW-846 3010A Mod.	1	05/08/2005 19:20	James L Mertz	1
07786	EDB Extraction	SW-846 8011	1	05/09/2005 12:10	Darin P Wagner	1

*=This limit was used in the evaluation of the final result



Analysis Report

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Lancaster Laboratories Sample No. WW 4518613

S121-050405 Grab Water Sample

SUN: Philadelphia Refinery AOI-4

Collected: 05/04/2005 14:00 by MBS

Account Number: 10132

Submitted: 05/05/2005 14:30

Langan

Reported: 05/17/2005 at 16:18

500 Hyde Park

Discard: 06/17/2005

Doylestown PA 18901

S-121

07807 BNA Water Extraction

SW-846 3510C

1 05/06/2005 21:00 Elia R Botrous

1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: Langan

Group Number: 942334

Reported: 05/17/05 at 04:19 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank LOQ**</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 05126WAF026	Sample number(s): 4518610-4518613								
Naphthalene	< 10.	10.	1.	ug/l	85	86	58-108	1	30
Fluorene	< 10.	10.	1.	ug/l	87	89	61-116	2	30
Phenanthrene	< 10.	10.	1.	ug/l	95	91	68-111	5	30
Pyrene	< 10.	10.	1.	ug/l	87	86	68-114	1	30
Chrysene	< 10.	10.	1.	ug/l	91	91	70-111	0	30
Batch number: 051280001A	Sample number(s): 4518610-4518613								
Ethylene dibromide	< 0.030	0.030	0.010	ug/l	100	100	60-140	0	20
Batch number: 051286050003A	Sample number(s): 4518610-4518613								
Lead	< 0.0010	0.0010	0.00021	mg/l	98		80-120		
Batch number: P051281AA	Sample number(s): 4518610-4518613								
Methyl Tertiary Butyl Ether	< 5.	5.	0.5	ug/l	91	89	77-127	2	30
Benzene	< 5.	5.	0.5	ug/l	98	97	85-117	1	30
1,2-Dichloroethane	< 5.	5.	1.	ug/l	92	93	77-132	1	30
Toluene	< 5.	5.	0.7	ug/l	95	95	85-115	0	30
Ethylbenzene	< 5.	5.	0.8	ug/l	94	94	82-119	0	30
Isopropylbenzene	< 5.	5.	1.	ug/l	93	94	80-120	1	30
Xylene (Total)	< 5.	5.	0.8	ug/l	94	95	83-113	0	30
Batch number: P051291AB	Sample number(s): 4518612								
Methyl Tertiary Butyl Ether	< 5.	5.	0.5	ug/l	91	89	77-127	2	30

Sample Matrix Quality Control

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 051280001A	Sample number(s): 4518610-4518613							
Ethylene dibromide	87		65-135		< 0.028	< 0.028	200* (1)	30
Batch number: 051286050003A	Sample number(s): 4518610-4518613							
Lead	100	98	75-125	2	< 0.0010	< 0.0010	15 (1)	20
Batch number: P051281AA	Sample number(s): 4518610-4518613							
Methyl Tertiary Butyl Ether	96		69-134					
Benzene	110		83-128					
1,2-Dichloroethane	102		73-136					
Toluene	103		83-127					

*- Outside of specification

**-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The background result was more than four times the spike added.

Quality Control Summary

Client Name: Langan
Reported: 05/17/05 at 04:19 PM

Group Number: 942334

Sample Matrix Quality Control

	MS	MSD	MS/MSD	RPD	BKG	DUP	DUP	Dup RPD
<u>Analysis Name</u>	<u>%REC</u>	<u>%REC</u>	<u>Limits</u>	<u>RPD</u>	<u>MAX</u>	<u>Conc</u>	<u>Conc</u>	<u>Max</u>
Ethylbenzene	99		82-129					
Isopropylbenzene	99		81-130					
Xylene (Total)	100		82-130					
Batch number: P051291AB Sample number(s): 4518612								
Methyl Tertiary Butyl Ether	87		69-134					

Surrogate Quality Control

Analysis Name: PAHs in Water by GC/MS

Batch number: 05126WAF026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
4518610	109	94	83
4518611	113	85	104
4518612	89	83	94
4518613	90	87	90
Blank	89	86	106
LCS	92	88	102
LCSD	91	94	104
Limits:	51-123	64-112	53-135

Analysis Name: EDB in Wastewater

Batch number: 051280001A

	1,1,2,2-Tetrachloroethane
4518610	119
4518611	107
4518612	89
4518613	95
Blank	104
DUP	104
LCS	106
LCSD	104
MS	119
Limits:	52-120

Analysis Name: UST-Waters by 8260B

Batch number: P051281AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
4518610	92	91	97	96
4518611	100	93	100	101
4518612	92	88	99	96
4518613	98	88	97	95
Blank	96	92	97	93
LCS	93	92	97	94
LCSD	95	92	96	96

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.

Quality Control Summary

Client Name: Langan

Group Number: 942334

Reported: 05/17/05 at 04:19 PM

Surrogate Quality Control

MS	100	96	96	95
Limits:	81-120	82-112	85-112	83-113
Analysis Name: 8260 Master Scan (water)				
Batch number: P051291AB				
	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
Blank	93	92	97	94
LCS	95	93	95	96
LCSD	95	94	96	96
MS	95	90	95	96
Limits:	81-120	82-112	85-112	83-113

*- Outside of specification

**-This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The background result was more than four times the spike added.

Analysis Request / Environmental Services Chain of Custody



For Lancaster Laboratories use only

Acct. # 10132 Group # 942234 Sample # 4518610-13 **COC #** 0081524

Please print. Instructions on reverse side correspond with circled numbers. Cooler temp 3.1-4.1°C

Client: Sun-Aquaticum/Langan Acct. #: _____
 Project Name: Sun-Philadelphia Refinery, AP-E-4 PWSID #: _____
 Project Manager: K. Nathan / J. Hanna P.O. #: _____
 Sampler: M. Brad Spence Quote #: _____
 Name of state where samples were collected: PA

2		3		4		5		6	
Sample ID	Time Collected	Time	Container	Water	Other	8700 Brix, MBE, Canna	8011 EDB	8270 Fluorene Phenanthrene	Remarks
S97-050405	5/4/05	1240	X	X					Disolved Pb samples are unfiltered/unpreserved
S123-050405	5/4/05	1230	X	X					
S28-050405	5/4/05	1315	X	X					
S121-050405	5/4/05	1400	X	X					

S97-050405	5/4/05	1240	X	X	8	_____ _____ _____ _____	Dissolved Pb samples are unfiltered/unpreserved
S123-050405	5/4/05	1230	X	X	8		
S28-050405	5/4/05	1315	X	X	8		
S121-050405	5/4/05	1400	X	X	8		

8		9	
Data Package Options (please circle if required)		Relinquished by:	
SDG Complete? Yes <u>(No)</u>		<u>Jessica B.</u>	
Site-specific QC required? Yes <u>(No)</u>		Date	
(If yes, indicate QC sample and submit triplicate volume.)		Time	
Internal Chain of Custody required? Yes <u>(No)</u>		Date	
		Time	

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D.	none detected	BMQL	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	MPN	Most Probable Number
IU	International Units	CP Units	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	NTU	nephelometric turbidity units
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is \geq the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but \geq IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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